

A B S T R A C T

The invention relates to a device for radiation treatment of proliferative tissue surrounding a cavity in an animal body comprising:

- at least a first inflatable chamber having a wall for placement in said cavity;
- a supportive probe having an elongated body with a distal end connected with said at least first inflatable chamber and a proximal end remaining outside said cavity;
- inflation means for inflating and deflating said at least first chamber;
- radiation delivering means for placing at least one energy emitting source within said cavity for performing said radiation treatment.

The invention aims to provide a device according the above preamble, wherein it is possible to temporarily position a solid energy emitting source in a reproducible manner at different locations within the inflated chamber, such that subsequent identical radiation treatment sessions can be performed, whereas the comfort of the patient is maxim and an out hospitalization treatment is possible.

According to the invention said radiation delivering means comprises at least one hollow, flexible tunnel channel having at least one fixation point to said wall of said first inflatable chamber and a proximal end remaining outside said cavity; wherein said at least one hollow, flexible tunnel channel serves to guide said at least one radiation emitting source inside said cavity.